WHAT IS CLAIMED IS:

1. A purified and isolated nucleic acid molecule which encodes human hepatitis C virus, said molecule capable of expressing said virus when transfected into cells.

2. The nucleic acid molecule of claim 1, wherein said molecule encodes the amino acid sequence shown in Figures 14G-14H.

3. The nucleic acid molecule of claim 2, wherein said molecule comprises the nucleic acid sequence shown in Figures 14A-14F.

4. The nucleic acid molecule acid molecule of claim 1, wherein said molecule encodes the amino acid sequence shown in Figures 4G-4H.

5. The nucleic acid molecule of claim 4, wherein said molecule comprises the nucleic acid sequence shown in Figures 4A-4F.

6. The nucleic acid molecule of claim 1, wherein a fragment of said molecule which encodes the structural region of hepatitis C virus has been replaced by the structural region from the genome of another hepatitis C virus strain.

7. The nucleic acid molecule of claim 6, wherein said molecule encodes the amino acid sequence shown in Figures 16G-16H.

8. The nucleic acid molecule of claim 7, wherein said molecule comprises the nucleic acid sequence shown in Figures 16A-16F.

9. The nucleic acid molecule of claim 1, wherein a fragment of the nucleic acid molecule which encodes at least one HCV protein has been replaced by a fragment of the genome of another hepatitis C virus strain which encodes the corresponding protein.

10. The nucleic acid molecule of claim 9, wherein the protein is selected from the group consisting of E1, E2 or NS4 proteins.

11. The nucleic acid molecule of claim 1, wherein a fragment of the molecule encoding all or part of an HCV protein has been deleted.

12. The nucleic acid molecule of claim 11, wherein the HCV protein is selected from the group consisting of P7, NS4B or NS5A proteins.

13. A DNA construct comprising a nucleic acid molecule according to claims 1, 3, 5 or 8.

14. An RNA transcript of the DNA construct of claim 13.

15. A cell transfected with the DNA construct of claim 13.

16. A cell transfected with RNA transcript of claim 14.

17. A hepatitis C virus polypeptide produced by the cell of claim 15.

18. A hepatitis C virus polypeptide produced by the cell of claim 16.

19. A hepatitis C virus produced by the cell of claim 13.

20. A hepatitis C virus produced by the cell of claim 14.

21. A hepatitis C virus whose genome comprises a nucleic acid molecule according to claims 1, 3, 5, 6, 8, or 9.

22. A method for producing a hepatitis C virus comprising transfecting a host cell with the RNA transcript of claim 14.

23. A polypeptide encoded by a nucleic acid sequence according to claims 1, 2, 4 or 7 or a fragment thereof.

24. The polypeptide of claim 23, wherein said polypeptide is selected from the group consisting of NS3 protease, E1 protein, E2 protein or NS4 protein.

25. A method for assaying candidate antiviral agents for activity against HCV, comprising

a) exposing a cell containing the hepatitis C virus of claim 21 to the candidate antiviral agent; and

b) measuring the presence or absence of hepatitis C virus replication in the cell of step (a).

26. The method of claim 25, wherein said replication in step (b) is measured by at least one of the following: negative strand RT-PCR, quantitative RT-PCR, Western blot, immunofluoresence, or infectivity in a susceptible animal.

27. A method for assaying candidate antiviral agents for activity against HCV, comprising:

a) exposing an HCV protease encoded by a nucleic acid sequence according to claims 1, 2, 4, or 7, or a fragment thereof to the candidate antiviral agent in the presence of a protease substrate; and

b) measuring the protease activity of said protease.

28. The method of claim 27, wherein said HCV protease is selected from the group consisting of an NS3 domain protease, an NS3-NS4A fusion polypeptide, or an NS2-NS3 protease.

29. An antiviral agent identified as having antiviral activity for HCV by the method of claim 25.

30. An antiviral agent identified as having antiviral activity for HCV by the method of claim 27.

31. Antibody to the polypeptide of claim 23.

32. Antibody to the hepatitis C virus of claim 21.

33. A method for determining the susceptibility of cells *in vitro* to support HCV infection, comprising the steps of:

a. growing animal cells in vitro;

b. transfecting into said cells the nucleic

acid of claim 1; and

c. determining if said cells show indicia of HCV replication.

34. The method according to claim 33, wherein said cells are human cells.

35. A cassette vector for cloning viral genomes, comprising, inserted therein, the nucleic acid sequence according to claim 2, said vector reading in the correct phase for the expression of said inserted sequence and having an active promoter sequence upstream thereof.

36. The cassette vector of claim 35, wherein the cassette vector is produced from plasmid pCV.

37. The cassette vector of claim 35, wherein the vector also contains one or more expressible marker genes.

38. The cassette vector of claim 35, wherein the inserted DNA sequence contains at least one ORF of the HCV genome from any strain.

39. The cassette vector of claim 35, wherein the promoter is a bacterial promoter.

40. A composition comprising a polypeptide of claim 23 suspended in a suitable amount of a pharmaceutically acceptable diluent or excipient.

41. A method for treating hepatitis C viral infection comprising the administration to a animal in need thereof of a clinically effective amount of the composition of claim 40.

42. A composition comprising a nucleic acid molecule of claim 1 suspended in a suitable amount of a pharmaceutically acceptable diluent or excipient.

43. A method for treating hepatitis C viral infection comprising the administration to an animal in need thereof of a clinically effective amount of the composition of claim 42.